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ABSTRACT

This report includes a discussion of five separate research studies which were conducted in preschool programs in Ontario, California during the year 1967-68. The first study includes only five children from Ontario in a larger project which attempted to assess young children's recognition of skin color differences. The second study was conducted in an effort to evaluate the level of social participation among one group of preschool children. The third study focuses on children's language and evaluates the use of the past tense by preschool children. The fourth project compares the Stanford-Binet scores obtained in October, 1967 with those in May, 1968 for two groups of children. The fifth study compares the amount of social interaction of preschool children in the Fall of 1967 and in the Spring of 1968. (Author)

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FIVE PILOT STUDIES: CONCERNED WITH SOCIAL-EMOTIONAL VARIABLES AFFECTING BEHAVIOR OF CHILDREN IN HEAD START

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Ontario-Montclair School District

Pre-School Evaluation

Margaret Faust

This report includes a discussion of five separate research studies which were conducted in preschool programs in Ontario, California during the year 1967-68. The first study (Mary Auble) includes only five children from Ontario in a larger project which attempted to assess young children's recognition of skin color differences. The second study (Gail Evans) was conducted at Sultana School in an effort to evaluate the level of social participation among one group of preschool children. The third study (Marjorie Royle) focuses on children's language and evaluates the use of the past tense by preschool children enrolled at Sultana School. The fourth project compares the Stanford Binet scores obtained in October, 1967 with those in May, 1968 for two groups of children, at Mariposa and Bon View Schools. Mary Ellen Brigante and Elizabeth Niven were the testers. The fifth study compares the amount of social interaction of preschool children in the Fall of 1967 and in the Spring of 1968. Pat Friedlander and Rita Wodinski were the observers at Bon View and Mariposa Schools.

Young children's recognition of skin color differences

Many investigators have been interested in finding out at what age children become aware of racial differences, and when they can identify themselves in terms of racial characteristics. It has been found that children as young as three or four years of age are beginning to form concepts of themselves and others which are based partly on rather superficial characteristics such as skin color. Mary Auble's pilot study focused on preschool children's awareness of their own skin color and their recognition of skin color differences among other people. Three instruments were used: 1) a Negro paper doll family and a White paper doll family from which each child was instructed to pick out the child that looked most like himself, like his father, his mother, etc. 2) a set of four pictures

depicting situations in which persons of different races were interacting, children were asked to describe the picture and then asked to point to the person who is "his brother", or "her baby", etc. 3) an outline figure of a boy and a girl and free choice of nine colors (black, brown, light brown, flesh, white, blue, yellow, green and red) with the instruction to color the outline "the way you look".

The contribution of this study is mainly one of testing methods for evaluating differences between Negro and White children's awareness of skin color. The method used was not appropriate for use with Mexican-American children because the facial features and coloring of the family dolls were either Negro or Anglo, not Mexican. However, for the six Negro children and five Anglo children in the sample, children consistently selected the appropriate Negro or White doll. When asked to pick out other dolls who belonged to the same family, brothers and sisters were identified by similar skin color 81% of the time, mother 54%, and the father 64% of the time.

With the four interracial pictures, no child mentioned skin color or other physical characteristics associated with racial differences in describing the pictures spontaneously. Although numerous details were pointed out, no one mentioned differences in facial features, hair, or skin coloring among the pictured children. Also, when a child was asked to point to the brother or the baby of a particular individual in a picture, only 27% of the children's selections were made in terms of similar skin color. Perhaps it is the case that most of these preschool children do not distinguish family members as having similar skin color. When the examiner pointed to a child in a picture and asked whether he could be a friend of another child who was depicted as having a different skin color, 91% responded affirmatively. In general it can be said that, although the children have some awareness of differences in skin color, it is not a major basis for classifying family members nor for selecting friends.

On the self-coloring test, children were scored plus or minus on the similarity between the colors selected for their drawing and their own skin and hair coloring. For the self-drawings of Negro and White children, only about 36% were drawn with colors somewhat resembling the child's own skin or hair coloring. Perhaps this finding has more to do with the children's color concepts, per se, than with their recognition and awareness of racial characteristics.

The development of self-awareness, self-identification, and recognition of differences among people is an important topic which needs to be studied carefully. Better testing methods should be devised, and certainly methods which are suitable for Mexican-American children should be developed.

Levels of social participation in free-play situations

The method of Parten and Newhall (1943) was used to describe the quality of social participation among preschool children. These results were then compared with the findings of the original investigators, who used middle-class, four year old children. Fourteen preschool children, seven boys and seven girls, were observed. Observations of the children were conducted in a predetermined order so that each child would be observed for equal amounts of time during each portion of the free-play period. The indoor play period occurred from approximately 9:30-10:30, while the outdoor play period was from about 11:00 to 11:45. During these periods the children were permitted to choose their own activities, and the observations were conducted only at these times.

The children were observed in rotation for one minute each, until 16 minutes (8 minutes outdoors and 8 minutes indoors) had been completed for each child. During each one minute observation of a child, the observer recorded the type of social participation in which the child was engaged, using these six categories:

1) Unoccupied Behavior: The child apparently is not playing at all, at least not in the usual sense, but occupies himself with watching anything which happens to be of momentary interest. When there is nothing exciting taking place, he plays with his own body, gets on and off chairs, just stands around, follows the teacher, or sits in one spot glancing around the room.

2) Solitary Play: The child plays alone and independently with toys that are different from those used by the other children within speaking distance and makes no effort to get close to or speak to the other children. His interest is centered upon his own activity, and he pursues it without reference to what others are doing.

3) Onlooker Behavior: The child spends most of his time watching the others play. He often talks to the playing children, asks questions or gives suggestions, but does not enter into the play himself. He stands or sits within speaking distance of the group so that he can see and hear all that is taking place. Thus he differs from the unoccupied child who notices anything that happens to be exciting and is not especially interested in groups of children.

4) Parallel Play: The child plays independently but the activity he chooses naturally brings him among other children. He plays with toys that are like those which the children around him are using, but he plays with the toys as he sees fit and does not try to influence the activity of the children near him. Thus he plays beside rather than with the other children.

5) Associative Play: The child plays with other children. There are borrowing and lending of play material; following one another with trains and wagons; mild attempts to control which children may or may not play in the group. All engage in similar if not identical activity; there is no division of labor and no organization of activity. Each child acts as he wishes and does not subordinate his interests to the group.

6) Cooperative or Organized Supplementary Play: The child plays in a group that is organized for the purpose of making some material product, of striving to attain some competitive goal, of dramatizing situations of adult or group life, or of playing formal games. There is a marked sense of belonging or not belonging to the group. The control of the group situation is in the hands of one or two members who direct the activities of the others. The goal as well as the method of attaining it necessitates a division of labor, the taking of different roles by the various group members, and the organization of activity so that the efforts of one child or another are supplemented by the various group members.

Each of the 14 children was observed 16 times, and the percentage of time during which the children were observed at each level of social participation was computed. Table 1 presents the social participation scores.

Table 1

Number of times each child was observed at each level of social participation

Child	Total Observations	Unoccupied	Solitary	Onlooker	Parallel	Associative	Cooperative
F-1	16	0	4	0	9	2	1
M-2	16	0	4	2	9	1	0
F-3	16	0	3	2	6	5	0
F-4	16	0	5	1	9	0	0
M-5	16	1	4	4	4	2	1
M-6	16	0	5	1	5	2	3
M-7	16	1	5	1	7	2	0
M-8	16	1	7	0	4	2	2
M-9	16	2	5	1	7	0	1
F-10	16	0	4	1	6	4	1
F-11	16	0	4	2	7	1	2
M-12	16	1	6	0	5	3	1
F-13	16	0	7	1	7	1	0
F-14	16	0	6	0	8	2	0
Total	224	6	70	16	93	27	12
Percent	100%	2.7%	31.3%	7.1%	41.5%	12.1%	5.3%

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From Table 1 it can be seen that Unoccupied Behavior was not observed at all among the girls (F-1, F-3, etc.) but it was observed among five of the seven boys (M-5, M-7, etc.). Unoccupied Behavior occurred for these boys mainly during the outdoor play period. All of the 14 disadvantaged children engaged in some Solitary Play; the average amount of Solitary Play for this group was nearly one-third of the total free-play time observed. Solitary Play occurred both indoors and outdoors; the main solitary activity outdoors was tricycle riding, while indoors it was puzzles and solitary games. These findings suggest that when indoors, children are more likely to find an activity in which they can participate alone; outdoors, some of the boys, particularly, seemed to be "at loose ends".

Table 2 shows the percent of total observation time during which the children were participating at each level, and compares these figures with those obtained by Parten and Newhall in their study of four-year-old, middle-class university children.

Table 2

Comparison of Percent of Free-play Time Spent at Each Level of Social Participation for Two Groups of Four-Year-Old Children

	Unoccupied	Solitary	Onlooker	Parallel	Associative	Cooperative
Disadvantaged	2.7%	31.3%	7.1%	41.5%	12.1%	5.3%
Advantaged	0.0%	9.5%	8.7%	30.1%	32.1%	19.6%

Here it can be seen that the Sultana children engaged in a great deal more solitary play (31.3%) than did Parten and Newhall's four-year-old group (9.5%). Combining the three non-interactive levels of social participation (Unoccupied, Solitary and Onlooker) the contrast between disadvantaged children and middle-class four-year-olds is very striking. While the disadvantaged children spent 41.1% of their time in nonsocially-interactive play, the advantaged four-year-olds spent 18.2% in such play.

Parallel play was the most frequently occurring form of participation for this group of children, both indoors and outdoors. Overall, parallel play occurred 41.5% of the time. Indoors, both the game and block areas were equally used for parallel play. The swings and the jungle gym accounted for most of the parallel play outdoors, the boys more frequently playing on the jungle gym and the girls on the swings.

Cooperative play was observed in five of the boys and in three of the girls. The boys were observed in cooperative play primarily outside, while the girls were observed only in indoor cooperative play. Of the four observations of cooperative behavior among the girls, three took place in the doll corner. In the disadvantaged school, cooperative play occurred only 5.3% of the time while it occurred in 19.6% of the observations of the Minnesota group.

When the incidence of cooperative and associative play are combined, they comprise 17.4% of the total, which indicates that spontaneous, interactive group play is a fairly rare occurrence among these disadvantaged children. By contrast, the advantaged four-year-olds spent almost 52 percent of their time in associative and cooperative play, combined.

To sustain more complicated group play, children certainly need a more elaborate, differentiated language than they now have at their command. In addition, the continual clarification and support of a teacher nearby might help these children to participate in more complex play.

This method of observing social participation seems particularly fruitful and should be expanded to include measures of the children's social participation at the beginning and end of a year's preschool program.

The use of the past tense among preschool children

A most critical deficit among disadvantaged children is in language development. Since Bernstein's work (1961) the emphasis in language development has

been away from ability to produce sounds correctly, size of vocabulary and even length of sentence, toward the more complex question of whether a child has learned a simple or an elaborated code. This emphasis on the structure of language rather than the quantity has led to a need for new testing instruments. Since disadvantaged children are notably weak in the use of the past tense, an instrument to assess this aspect of language was developed.

Two different methods of teaching young children to use the past tense of verbs were studied: one, an "active method" and the other a "passive method". A control method involved social and verbal interaction with the children, without focusing on verb usage specifically.

Fifteen children were stratified on the basis of scores on a past tense usage test (see below), and randomly assigned, five to each of three groups or conditions: the "active learning" method, the "passive learning" method, and the control group. Each group was given eight twenty-minute "lessons" over a five week period. The active group participated in stories, drills, and games in which they produced sentences using the past tense correctly. The passive learning group listened to stories using the past tense, but were not required to verbalize overtly, while the control group played games and did art activities. The same experimenter led all three groups.

In order to compare the effects of the two training methods with the results of the control group, a test of past tense (see Appendix) was given before and after the five week training period. This test involved setting up situations which were likely to elicit from children responses requiring the use of the past tense. For example, the examiner piled up some blocks and then knocked them

down; opened a book, etc. After each situation the child was asked: "What did I do?" Each child was tested individually and his answers were recorded automatically on a tape recorder. All the responses were later coded, using the following five categories:

(1) Correct past tense. ("You dropped it.")

(2) Incorrect past tense. ("Eated it." "She readed her book.")

(3) Present tense. ("Roll the ball.")

(4) Participle form without auxiliary verb. ("He driving." "Playing.")

(5) No verb used in response. ("Snow on that dog." "They in the rain.")

Since children differed in the total number of responses made, a child's score for each category was a ratio of responses made to total number of responses. Scores for each of the five categories were computed, but only the percent of past tense usage is reported in the statistical comparisons among the treatment groups in Table 3.

Table 3

Percent of Past Tense Usage
on Pre- and Posttests by Treatments

Treatment		Individual Children				
		1	2	3	4	5
Active	Pre-	59	49	42	27	19
	Post	60	22	66	39	23
Passive	Pre-	83	35	19	18	12
	Post	95	39	25	22	18
Control	Pre-	83	32	31	21	18
	Post	95	07	22	05	14

Generally, there were gains for both the active and passive learning groups after the five weeks of training, but not for the control group which received no training. It can be seen that the scores increased for nine of the ten children who were given training (active or passive), while only one of the five children in the control group improved from pre- to posttest.

Since there were no significant differences between the gains made by the active and the passive groups, using a Mann-Whitney Test, these two groups were combined and compared. The gains for the trained groups were significantly greater than those of the control ($p < .05$).

Table 4

Comparison between experimental and control groups in their increases between pre- and post tests

	Active + passive	Control	
Above median increase	8	1	9
Below median increase	2	4	6
	10	5	15

It may be concluded that specific training in the use of the past tense does improve children's scores on this test. With the data so far available it is not possible to distinguish between the value of the active and passive training methods, although theory on language development would tend to favor an active method of learning language.

Further research on teaching and learning of language should be undertaken; different methods of teaching language should be tried and subsequently evaluated. Focusing on one particular aspect of the structure of language seems

promising, and new instruments for evaluation of these aspects need to be developed.

Groups changes in Stanford-Binet scores

Under the auspices of the U. C. L. A. Regional Head Start Evaluation and Research Office, Stanford-Binet tests were administered individually to preschool children enrolled at Mariposa and Bon View Schools. Tests were given within the first six weeks of the preschool program (October, 1967) and within the last six weeks of the school year (May, 1968). Tests were administered in English to all except two children who spoke predominantly Spanish. These two children were given the Spanish form of the Stanford-Binet in October. At the end of the year all of the children were given the Binet test in English. Since eight children moved out of the district or were dropped from the program, the comparison of pre- and post-test scores is made on 22 children.

At the beginning of the year the average I.Q. was 89.7 and at the end of the school year, 100.4. The average gain in I.Q., therefore, was 10.7 points. Using a "t" test this difference between pre- and post-test scores is significant at the .05 level. The gain is so large that it is very unlikely to have occurred by chance factors alone. The average I.Q. for the group at the end of the school year is at the national average for the Stanford-Binet test.

Table 5 shows the pre- and post-test scores and the amount of change in I.Q. for the 22 children who were enrolled all year in the preschool program and thus were tested twice.

It can be seen that 19 of the 22 children scored higher on the second test than on the first test. Of those whose I.Q. scores decreased, two dropped only one point; the third child had missed many days of the preschool program during the year. Both children tested in Spanish at the beginning of the year took the test in English in May and both showed greater gains than was average for the group. Had these two been tested in English at the beginning of the year, the I.Q. gain would undoubtedly have been even greater.

One of the Stanford-Binet testers reported that: "Virtually all members of the group showed considerably more social ease and confidence during the second testing — were more verbal, felt freer to express themselves and were more

Table 5

PRE- AND POSTTEST STANFORD-BINET SCORES FOR TWO GROUPS

OCT. 1967	MAY 1968	DIFFER-ENCE	OCT. 1967	MAY 1968	DIFFER-ENCE
103	105	2	97	103	6
78	93	15	97	115	18
99	90	-9	87	86	-1
83*	95	12	91	109	18
85	84	-1	80	94	14
94	105	11	97	114	17
96	115	19	89	109	20
89	103	14	98*	117	19
80	89	9	76	90	14
85	92	7	92	98	6
86	98	12	91	105	14

*Tested in Spanish on first test.

comfortable with the examiner even in unfamiliar surroundings. Most showed greater involvement in the testing, reacted more openly to the situation."

Social Interaction of Preschool Children

As part of the national evaluation of Head Start under the U. C. L. A. office, social interaction of children at Mariposa and Bon View Schools was observed and recorded during two different time periods from 1967-1968. The first set of observations was made during November 1967 and the second occurred during May and June, 1968.

The method for observing and recording is fully described in the University of Kansas Head Start Evaluation and Research Center manual entitled "Social Interaction Observation Procedure". Basically it involves objective observing and recording, at 10-second intervals, of the social contacts initiated by each child and the responses of others made to him during the period of time each child is being observed.

Each child was observed for a total of 45 minutes in the Fall and 45 minutes in the Spring. Observations were made only during unstructured or semi-structured periods of the program. Each child was observed in a predetermined order for three minutes, and then the next child in order was observed. An equal number of three minute observations were made on each child at the beginning, middle, and end of the period allotted for free- or semi-structured play.

"Initiation" for the purpose of this procedure is defined as "those verbal and non-verbal behaviors of a child which are directed toward others (adults or peers)." If the person to whom the child is initiating responds to him, the contact is called an "interaction". Both a child's initiation of social contacts toward others and their responses toward him are recorded. Whether the initiation or interaction is verbal or non-verbal is also noted.

The results reported here include both verbal and non-verbal initiations and interactions. Changes refer to differences between the observation scores obtained in the Fall, 1967 and in the Spring, 1968.

Both groups of children increased in the number of verbal contacts initiated toward others, over the year. During the same period the number of non-verbal initiations decreased slightly. Neither of these changes were great enough to reach statistical significance, but they do suggest a tendency for the group to rely more on verbal means for contacting others than was the case at the beginning of the program.

There was a highly significant increase, however, in the number of verbal responses made by children who had been contacted by others. The "t" test comparing the number of verbal responses which children made in November and in May was significant beyond the level $p < .001$. It may be said that while the initiation of verbal contacts increased slightly, the verbal responses of the children contacted changed greatly. This probably reveals the fact that in the Fall, many children were passive or non-responsive verbally when contacted by a child, whereas by Spring, the children were much more likely to reply verbally when contacted by others.

Non-verbal responses were also more frequent at the end of the school year in both groups, but only in the Mariposa group was the difference in non-verbal responses great enough to reach statistical significance. It appears that the children in both groups became more responsive to the social overtures made toward them, and this responsiveness showed up particularly in the increased frequency of verbal replies.

The amount of social interaction with peers and with adults showed some changes over the year, but the changes were slightly different in the two groups. At Mariposa School the preschoolers increased significantly in the number of verbal interactions with adults from November to May. At Bon View School, the number of

verbal interactions with peers increased significantly over the year. It is interesting to note in both cases it was the verbal rather than the non-verbal social interactions which increased significantly, and this undoubtedly reflects the increased verbal competence which the children gained during the year.

It should be pointed out that the significant increase in interaction with adults at Mariposa means only that the children there interacted with adults more in May than they had in October. At Bon View School the average number of adult interactions was as high, but did not change significantly over the year. Similarly, the significant increase in peer interactions at Bon View indicates that the verbal interactions with peers at that school changed over the year. At Mariposa, the average number of peer interactions was as high, but did not change significantly over the year. In each school the amount of verbal interaction increased with either peers or with adults, whichever one was lower at the beginning of the program. At both schools there is evidence of greater social interaction of a verbal nature, and greater verbal responsiveness to the others in the group.

References

Parten, M. B., & Newhall, S. M. Social behavior of preschool children. In R. G. Barker, J. S. Kounin, & H. F. Wright (Eds.), Child behavior and development. New York: McGraw Hill, 1943.

Bernstein, B. Social class and linguistic development. In A. H. Halsey (Ed.), Education, economy and society. New York: Free Press of Glencoe, 1961.

Appendix

Description of the Past Tense Test

Situation	Questions
1. Tester piles up blocks.	What did I do with the blocks?
2. Tester knocks blocks down.	What did I do with them now?
3. Tester bounces ball.	What did I do with the ball?
4. Tester rolls ball.	What did I do with it now?
5. Tester opens book. (Usually Charlie Brown comic)	What did I do with the book?
6. Tester closes book.	What did I do with it now?

"Now I'm going to show you some pictures. In each picture, can you tell me what the boy or girl did, what happened in the picture?"

7. Picture of boy eating breakfast of cereal, egg, milk, toast, juice, with dog looking on.	What did this boy do?
8. Picture of boy combing hair, holding hand mirror, girl brushing hair, dog looking on.	What did the boy do? What did the girl do? (Boy question given first to boys, girl question usually given first to girls.)
9. Girl and boy in bathroom, girl washing boy's ear with cloth, both children in underwear, dog has towel over head.	What did the girl do (to the little boy)? or What happened here?
10. Boy and girl in raincoats, boots, rainhats, and carrying umbrella with books, walking in rain. Dog getting wet.	What happeded here?
11. Bathroom scene, mother holding baby, girl washing hair, with soap on hair, other girl drying boy's hair.	What did this girl do? (washed her hair - many said put hat on) What did this girl do? (dried his hair)
12. Schoolroom, two girls with books open, one sneezing, holding tissue to mouth.	What did this girl do? (Was reading) What did she do? (Sneezed)
13. Boy sitting in chair, reading, eating apple, with bowl of fruit beside him. Dog sleeping on floor.	What did the boy do?

Test Description (cont.)

4. Family at a table, eating, mother bringing dish of food.	What happened here? or What did the family do?
5. Children playing with snowman, piece of snow fell on dog's head.	What did the boy and girl do? What happened here (to the doggie)?
6. Children going to school, crossing street in crosswalk with green light. Car stopped at light.	What did the children do? What did the man in the car do?
7. Boy, having given water to dog, is drinking water.	What did the boy do? What did he do for the doggie?
8. Family at grocery store with full shopping cart.	What did the family do? or What happened here?
9. Boy taking bath in tub, with soap, boat, and duck. Dog looks on.	What did the boy do? or What happened here?
20. Two boys and girl playing, one boy with car, other writing with chalk, girl bouncing ball.	What did the children do? What did she do? What did the boy do with the chalk?
21. Boy, in bathroom, brushing teeth, with glass of water, in pajamas. Dog watching.	What did the boy do? or What happened here?
22. Girl asleep in bed with doll, window open.	What did the girl do? or What happened here?
23. Father sitting in rocker, one boy on lap, other standing near. Lunchbox on floor.	What did the daddy do?
24. Mother putting coat on baby, baby on blanket on table.	What did the mommy do?
25. Two boys playing in yard with dog and ball. Ball, against tree, looks like apple.	What did the boys do?
26. Father, boy and girl swimming.	What happened here? or What did the family do?
27. Mother, two children in kitchen, she is getting jars from shelf, they are making toast.	What did the mommy do?
28. Children getting on school bus, driver in bus.	What did the boys and girls do? What did the bus driver do?
29. Scene in department store. Mother and two children going up escalator, woman leaving store, woman putting material on counter. (Often children saw this as airport	What did the family do? What did that lady do? (went outside) sometimes - What did that lady do? (dusted counter).